

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A computer-implemented method, comprising:
storing a list of physical resource objects;
storing a list of virtual resource objects;
storing a list of parent and child objects, a parent object to represent a physical resource object, and a child object to represent a virtual resource object; and
creating a tree of relationships of the parent and child objects to the physical and virtual resource objects.
2. (Original) The method of claim 1, wherein storing a list of virtual resource objects includes storing an object representing system memory bandwidth.
3. (Original) The method of claim 2, wherein storing a list of child objects includes storing an object representing a functional unit that consumes bandwidth.
4. (Original) The method of claim 3, wherein storing an object representing a functional unit that consumes bandwidth includes storing an indication of the amount of bandwidth consumed.
5. (Original) The method of claim 4, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents an overlay unit.
6. (Original) The method of claim 4, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents a cursor unit.
7. (Original) The method of claim 4, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents a display output unit.

8. (Currently Amended) The method of claim 1, wherein a root of the tree represents a physical resource object~~wherein storing a list of virtual resource objects includes storing an object representing local graphics memory bandwidth.~~

9. (Currently Amended) The method of claim ~~1~~ 8, wherein storing a list of child objects includes storing an object representing a functional unit that consumes bandwidth.

10. (Original) The method of claim 9, wherein storing an object representing a functional unit that consumes bandwidth includes storing an indication of the amount of bandwidth consumed.

11. (Original) The method of claim 10, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents an overlay unit.

12. (Original) The method of claim 10, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents a cursor unit.

13. (Original) The method of claim 10, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents a display output unit.

14. (Currently Amended) A computer-implemented method, comprising:
maintaining a record of available resources;
maintaining a record of consumed resources;
tracking a relationship among resource producers and resource consumers in a tree data structure, a root of the tree data structure to represent a physical device that consumes the available resources; and
updating the records of available and consumed resources upon a change in relationship among resource producers and resource consumers.

15. (Previously Presented) The method of claim 14, wherein tracking relationships among resource producers and resource consumers includes tracking a relationship between a system memory bandwidth producer and a system memory bandwidth consumer.

16. (Previously Presented) The method of claim 14, wherein tracking relationships among resource producers and resource consumers includes tracking a relationship between a graphics local memory bandwidth producer and a graphics local memory consumer.

17. (Currently Amended) A machine-readable medium having stored thereon instructions which, when executed by a computer system, causes the computer system to perform a method comprising:

storing a list of physical resource objects;

storing a list of virtual resource objects;

storing a list of parent and child objects, a parent object to represent a physical resource object, and a child object to represent a virtual resource object; and

creating a tree of relationships of the parent and child objects to the physical and virtual resource objects.

18. (Original) The machine-readable medium of claim 17, wherein storing a list of virtual resource objects includes storing an object representing system memory bandwidth.

19. (Original) The machine-readable medium of claim 18, wherein storing a list of child objects includes storing an object representing a functional unit that consumes bandwidth.

20. (Original) The machine-readable medium of claim 19, wherein storing an object representing a functional unit that consumes bandwidth includes storing an indication of the amount of bandwidth consumed.

21. (Original) The machine-readable medium of claim 20, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents an overlay unit.

22. (Original) The machine-readable medium of claim 20, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents a cursor unit.

23. (Original) The machine-readable medium of claim 20, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents a display output unit.

24. (Original) The machine-readable medium of claim 17, wherein storing a list of virtual resource objects includes storing an object representing local graphics memory bandwidth.

25. (Original) The machine-readable medium of claim 24, wherein storing a list of child objects includes storing an object representing a functional unit that consumes bandwidth.

26. (Currently Amended) The machine-readable medium of claim ~~17~~ 25, wherein a root of the tree represents a physical resource object ~~wherein storing a list of virtual resource objects includes storing an object representing local graphics memory bandwidth.~~

27. (Original) The machine-readable medium of claim 26, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents an overlay unit.

28. (Original) The machine-readable medium of claim 26, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents a cursor unit.

29. (Original) The machine-readable medium of claim 26, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents a display output unit.

30. (Currently Amended) A machine-readable medium having stored thereon instructions which, when executed by a computer system, causes the computer system to perform a method comprising:

maintaining a record of available resources;

maintaining a record of consumed resources;

tracking relationships among resource producers and resource consumers in a tree data structure, a root of the tree data structure to represent a physical device that consumes the available resources; and

updating record of available and consumed resources upon a change in relationship among resource producers and resource consumers.

31. (Previously Presented) The machine-readable medium of claim 30, wherein tracking relationships among resource producers and resource consumers includes tracking a relationship between a system memory bandwidth producer and a system memory bandwidth consumer.

32. (Previously Presented) The machine-readable medium of claim 31, wherein tracking relationships among resource producers and resource consumers includes tracking a relationship between a graphics local memory bandwidth producer and a graphics local memory consumer